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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/695,612	10/24/2000	Joseph B. Richey II	INVA-Q-CIP-2	2971
24024	7590	10/19/2005	EXAMINER	
CALFEE HALTER & GRISWOLD, LLP 800 SUPERIOR AVENUE SUITE 1400 CLEVELAND, OH 44114			WIEKER, AMANDA FLYNN	
			ART UNIT	PAPER NUMBER
			3743	

DATE MAILED: 10/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

TALIN

Office Action Summary

Application No.

09/695,612

Applicant(s)

RICHEY ET AL.

Examiner

Amanda F. Wieker

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 September 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-10, 23, 24 and 28-34 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 3, 23 and 24 is/are allowed.
- 6) ☒ Claim(s) 2 and 4-10 is/are rejected.
- 7) ☒ Claim(s) 28-34 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 October 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Double Patenting

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claims 2 and 4-10 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-2 and 6 of U.S. Patent Number 5,988,165 ('165) to Richey, II et al in view of U.S. Patent Number 6,805,122 ('122) to Richey, II et al.

'165 claims an apparatus for compressing and storing an oxygen-enriched gas comprising a concentrated oxygen source having oxygen-enriched gas therein, wherein said oxygen enriched gas contains at least about 50% oxygen by volume; a piston compressor

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operatively connected to said oxygen source to receive the at least 50% oxygen by volume gas therefrom, said compressor being capable of compressing said oxygen-enriched gas to a high pressure; and a high-pressure storage container for portable storage of said high-pressure oxygen-enriched gas (claim 1). '165 claims that said oxygen-enriched gas is prioritized by a portion thereof being capable of being fed to a person and a portion thereof being capable of being fed to said compressor, wherein said prioritization includes a determination of an oxygen concentration of said oxygen enriched gas by an oxygen sensor and the termination of the flow of oxygen-enriched gas to the compressor when the enriched oxygen gas is below a predetermined oxygen level (claim 2). '165 discloses that the compressor be a multi-stage compressor and have a plurality of pistons of sequentially smaller compressible area, to sequentially compress the gas (claim 6). '165 does not specify that the compressor be a radial compressor or that the prioritization involve terminating operation of the compressor.

'122 discloses an apparatus for compressing and storing an oxygen-enriched gas, wherein oxygen-enriched gas is provided from an oxygen concentrator to a radial compressor, wherein a radial compressor is preferred because of its compact structure. The radial compressor involves multiple pistons arranged radially around a crankshaft, to sequentially compress the gas. Further, '122 discloses that flow of oxygen-enriched gas is prioritized by a portion being fed to a person and a portion being fed to said radial compressor, wherein the operation of said radial compressor is terminated (and therefore, termination of flow to high-pressure storage) when said enriched-oxygen gas is below a predetermined oxygen level, so as to primarily support the patient.

It would have been obvious to one skilled in the art at the time the invention was made to have provided the apparatus disclosed by '165 wherein the compressor is a radial

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compressor and the prioritization process involves terminating the operation of the compressor, as taught by '122, to provide a compact compressor and to support the patient primarily.

3. Claims 2 and 4-10 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-3, 9-10 of '122 to Richey, II et al. in view of '165 to Richey, II et al.

'122 claims an apparatus for compressing and storing an oxygen-enriched gas comprising a concentrated oxygen source having oxygen-enriched gas therein, wherein said oxygen enriched gas contains at least about 50% oxygen by volume (claim 2); a radial compressor operatively connected to said oxygen source to receive the at least 50% oxygen by volume gas therefrom, said compressor being capable of compressing said oxygen-enriched gas to a high pressure; and a high-pressure storage container for portable storage of said high-pressure oxygen-enriched gas (claim 1). '122 claims that said oxygen-enriched gas is prioritized by a portion being fed to a person and a portion being fed to said compressor, said prioritization includes a determination of an oxygen concentration of said oxygen enriched gas and the termination of the compressor (and therefore, termination of flow to high-pressure storage) when the enriched oxygen gas is below a predetermined oxygen level (claim 1). '122 further discloses the specific piston arrangement of the radial compressor (claim 3). '122 does not specify that the oxygen concentration is determined by an oxygen sensor.

'165 claims an apparatus for compressing and storing an oxygen-enriched gas comprising an oxygen sensor to accurately determine the oxygen concentration of the enriched gas.

It would have been obvious to one skilled in the art at the time the invention was made to have provided the apparatus claimed by '122, wherein the oxygen concentration is determined by an oxygen sensor, as taught by '165, to give an accurate measurement of oxygen concentration.

4. Claims 2 and 4-10 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-3 and 9-10 of U.S. Patent Number 6,923,180 ('180) to Richey, II et al. in view of '165 to Richey, II et al.

'180 claims an apparatus for compressing and storing an oxygen-enriched gas comprising a concentrated oxygen source having oxygen-enriched gas therein, wherein said oxygen enriched gas contains at least about 50% oxygen by volume (claim 2); a radial compressor operatively connected to said oxygen source to receive the at least 50% oxygen by volume gas therefrom, said compressor being capable of compressing said oxygen-enriched gas to a high pressure; and a high-pressure storage container for portable storage of said high-pressure oxygen-enriched gas (claim 1). '180 claims that said oxygen-enriched gas is prioritized by a portion being fed to a person and a portion being fed to said compressor, said prioritization includes a determination of an oxygen concentration of said oxygen enriched gas and the termination of said compressor (and therefore, termination of flow to high-pressure storage) when the enriched oxygen gas is below a predetermined oxygen level (claim 1). '180 further discloses the specific piston arrangement of the radial compressor (claim 3). '180 does not specify that the oxygen concentration is determined by an oxygen sensor.

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'165 claims an apparatus for compressing and storing an oxygen-enriched gas comprising an oxygen sensor to accurately determine the oxygen concentration of the enriched gas.

It would have been obvious to one skilled in the art at the time the invention was made to have provided the apparatus claimed by '180, wherein the oxygen concentration is sensed by an oxygen sensor, as taught by '165, to give an accurate measurement of oxygen concentration.

Allowable Subject Matter

5. Claims 3 and 23-24 are allowed.
6. Claims 28-34 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Amanda F. Wieker whose telephone number is 571-272-4794. The examiner can normally be reached on Monday-Thursday, 7:30 - 5:00 and alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Henry Bennett can be reached on 571-272-4791. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


afw

Amanda F. Wieker
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Art Unit 3743


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